

REMARKS

By way of the present amendment, Claims 2 and 8-14 are pending. Claims 2, 9-10, and 12 are hereby amended and Claims 10-13 are withdrawn. No new matter has been added by these amendments. Support for the foregoing amendments may be found in the sequence listing, in the original claims and throughout the specification e.g., at page 19, lines 1-11. No new matter is added by the present amendment.

I. Rejection under 35 U.S.C. § 101

Applicants thank the Examiner for withdrawing the rejection under 35 U.S.C. § 101. Office Action at pages 2-3.

II. Rejection Under 35 U.S.C. § 112, First Paragraph, Enablement

Applicants thank the Examiner for withdrawing the rejection under 35 U.S.C. § 112, first paragraph, enablement. *Id.*

III. Claim Rejections under 35 U.S.C. § 102

Claims 2 and 9 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Alexandrov *et al.* (EP 1 033 405). Office Action at page 3. Applicants respectfully traverse. In rejecting the claims, the Examiner asserts that “Alexandrov *et al.* disclose multiple polypeptides including a polypeptide, a *Zea Mays* polypeptide, comprising an amino acid sequence that shares a 99.5% overall match with the full-length sequence of the instant SEQ ID NO: 44293. See the previously provided sequence alignment between SEQ ID NO: 44293 and the sequence of database Geneseq accession number AAG44293, which is the same sequence as that of SEQ ID NO. 56142 disclosed by Alexandrov *et al.*” *Id.* (emphasis in original). Applicants disagree.

At the outset, Applicants request that the Examiner explain the relationship between AAG44766, SEQ ID NO: 56, 142 of EP1033405, and the sequence asserted to be 99.5% identical to the claimed sequence, including a basis for the date the cited sequence is disclosed.

Applicants disagree with the Examiner's characterization of the percent identity match between SEQ ID NO: 44293 and that of accession number AAG44786. A sequence comparison between SEQ ID NO: 44293 and AAG44786, a 153 amino acid sequence, yields only 14% identity over the 220 amino acid length of SEQ ID NO: 44293.¹ This is insufficient to render the claims anticipated as anticipation requires disclosure of each and every claim limitation in a single prior art reference, either explicitly or inherently. *MEHL/Biophile International Corp. v. Milgram*, 192 F.3d 1362, 1365 (Fed. Cir. 1999). Accordingly, withdrawal of the rejection is requested.

Moreover, Applicants disagree with the Examiner's assertion that the claims are not entitled to priority to U.S. Application No. 09/654,617 (filed September 5, 2000) and U.S. Application No. 09/684,016 (filed October 10, 2000). Office Action at page 4. As set forth in

1	AAG44786	(1)	-----MVITYGLDQLENC
SEQ ID NO: 44293		(1)	MGQQLIYAFVARGTVILAEYTEFTGNFTTASQCLMKLPASNKNFTYNC
		51	100
	AAG44786	(14)	QTCGTNYIIS-VLNLTLIVEQINTKLPSSFVEKLFIPSSK-----
SEQ ID NO: 44293		(51)	DGHTFNLYLVEDGFTYCVVAVESVGGQIPIAFMDRVKEDFTKRYGGGKAAT
		101	150
	AAG44786	(54)	-----LLFLRYHKEEVAVAHAVYQAMLSLKNI PVLETAYKLI LGEMTC
SEQ ID NO: 44293		(101)	AAANSLNREFGSKLKEHMQYCVDHPPEVSKLAKVKAQVSEVKGVMMENIE
		151	200
	AAG44786	(99)	ALNLLHSLQLPEACSEIKHEAFKNHVFNVDNAKFVVKFDLSALTIGNA
SEQ ID NO: 44293		(151)	KVLDRGEKIELLVDKTENLRSAQDFRQQTNVRKMWLQNMKIKLIVLG
		201	220
	AAG44786	(149)	KNSSL-----
SEQ ID NO: 44293		(201)	IIIALILIIILSVCHGFKCH

the response submitted on February 4, 2009, without being limited, support for SEQ ID NO: 44293 in the captioned application can be found in both U.S. Application No. 09/654,617 (filed September 5, 2000) and U.S. Application No. 09/684,016 (filed October 10, 2000). Specifically, positions 205-864 of the nucleic acid sequence of SEQ ID NO: 271,143 in both U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 encode the amino acid sequence of SEQ ID NO: 44293 in the captioned application.² As such, the claims are entitled to a priority of at least September 5, 2000, which is earlier than the September 6, 2000 publication date of Alexandrov *et al.*

Furthermore, Applicants disagree with the Examiner's assertion that the nucleic acid sequence disclosed in both U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 fails to provide adequate support for amino acid sequence SEQ ID NO: 44293. Both U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 describe the nucleic acid sequence which encodes amino acid sequence SEQ ID NO: 44,293. That is, the nucleic acid sequence of SEQ ID NO: 271,143 in both U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 codes for the amino acid sequence of SEQ ID NO: 44293. Such is sufficient grounds for a priority claim as "[a] patent's specification may inherently

² SEQ ID NO: 271,143 contains a total of 1185 bases and the nucleic acid position from 205-864 has the following sequence:

```
ATGGGGCAGCAGTCGCTGATCTACGCGTTCTGTTGGCCCCGTGGCACGGTCATACTGGCCGAGTACACGGA  
GTTACACGGCAACTTCACACCATCGCCTCCCAGTGCTCATGAAGCTCCCCGCAAGCAACAACAGTT  
CACCTACAACCTGCGACGGTCACACTTTCAATTACCTCGTGGGAAGACGGATTACATACTGTGTTGTTGC  
TGTTGAATCGGTGGGGCAACAAATTCCTATTGCTTTCATGGATAGGGTTAAGGAGGATTCACAAAAA  
GGTATGGTGGTGGGAAAGCTGCTACTGCTGCAGCTAACAGCCCTCAATCGAGAGTTTGGATCAAAACCTT  
AAAGAACACATGCAGTATTGTGTGGATCACCTGAAGAGGTTAGCAAGCTGGCCAAAGTGAAGGCGCA  
GGTTTCAGAAAGTCAAGGGTGTATGATGGAACAAATTTGAAAAGGTTCTGGATCGTGGAGAGAAAGATTG  
AGCTGCTTGTGACAAAGACCGAGAATCTTCGCTCACAGGCACAAGATTTCAGACAGCAGGGGAACAAAT  
GTCAGGAGAAAGATGTGGTTACAGAACATGAAAATCAAGCTCATCGTCTGGGAATAATCATCGCACT  
CATTCTGATCATTATCTCTCTGTCTGTCATGGTTTCAATGCCAT
```

contain a disclosure sufficient to meet the written description requirement if “the missing descriptive matter must necessarily be present in the parent application's specification such that one skilled in the art would recognize such a disclosure.”” 17. *Alza Corp. v. Mylan Laboratories, Inc.*, 388 F.Supp.2d 717, 727 N.D.W.Va., 2005 (quoting *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed.Cir.1998)).

For all of the foregoing reasons, Applicants respectfully request withdrawal of this rejection.

IV. Claim Rejections under 35 U.S.C. § 103

Claim 8 stands rejected under 35 U.S.C. § 103(a) as allegedly obvious over Alexandrov *et al.* (EP 1 033 405). Office Action at page 6. Applicants respectfully traverse. In rejecting the claims, the Examiner asserts that “Alexandrov *et al.* disclose multiple polypeptides including a polypeptide, a *Zea Mays* polypeptide, comprising an amino acid sequence that shares a 99.5% overall match with the full-length sequence of the instant SEQ ID NO: 44293. See the previously provided sequence alignment between SEQ ID NO: 44293 and the sequence of database Geneseq accession number AAG44786, which is the same sequence as that of SEQ ID NO. 56142 disclosed by Alexandrov *et al.*” *Id.* (emphasis in original). Applicants disagree.

Again, Applicants request that the Examiner explain the relationship between AAG44766, SEQ ID NO: 56,142 of EP1033405, and the sequence asserted to be 99.5% identical to the claimed sequence, including a basis for the date the cited sequence is disclosed.

Moreover, Applicants disagree with the Examiner's characterization of the percent identity match between SEQ ID NO: 44293 and that of accession number AAG44786. Again, a

sequence comparison between SEQ ID NO: 44293 and AAG44786, a 153 amino acid sequence, yields only 14% identity over the 220 amino acid length of SEQ ID NO: 44293. See the attached NCBI sequence accession number of AAG44786. Accordingly, withdrawal of the rejection is requested as accession number AAG44786 exhibits only 14% identity to SEQ ID NO: 44293 and the Examiner has provided no rationale that such a low percentage identity would render the claims obvious.³

Moreover, as set forth above, Applicants disagree with the Examiner's assertion that the claims are not entitled to priority to U.S. Application No. 09/654,617 (filed September 5, 2000) and U.S. Application No. 09/684,016 (filed October 10, 2000). *Id.* at page 4. Support for SEQ ID NO: 44,293 in the captioned application can be found in both U.S. Application No. 09/654,617 (filed September 5, 2000) and U.S. Application No. 09/684,016 (filed October 10, 2000). Specifically, positions 205-864 of the nucleic acid sequence of SEQ ID NO: 271,143 in both U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 encode the amino acid sequence of SEQ ID NO: 44,293 in the captioned application. As such, the claims are entitled to a priority of at least September 5, 2000, which is earlier than the September 6, 2000 publication date of Alexandrov *et al.*

Furthermore, Applicants disagree with the Examiner's assertion that the nucleic acid sequence disclosed in both U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 fails to provide adequate support for amino acid sequence SEQ ID NO: 44293. Both

³ See the discussion above regarding the relationship between AAG44766 and SEQ ID NO: 56,142 of EP1033405.

U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 describe the nucleic acid sequence which encodes amino acid sequence SEQ ID NO: 44,293. That is, the nucleic acid sequence of SEQ ID NO: 271,143 in both U.S. Application No. 09/654,617 and U.S. Application No. 09/684,016 codes for the amino acid sequence of SEQ ID NO: 44293. Such is sufficient grounds for a priority claim as “[a] patent's specification may inherently contain a disclosure sufficient to meet the written description requirement if the missing descriptive matter must necessarily be present in the parent application's specification such that one skilled in the art would recognize such a disclosure.” *Alza Corp.*, 388 F.Supp.2d 717, 727 N.D.W.Va., 2005 (quoting *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed.Cir.1998)). .

For all of the foregoing reasons, Applicants respectfully request withdrawal of this rejection.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present application is now in condition for allowance, and respectfully request notice of such. The Examiner is encouraged to contact the undersigned at 202-942-5394 if any additional information is necessary for allowance.

Respectfully submitted,

Date: June 17, 2009



David R. Marsh (Reg. No. 41,408)
Lisa A. Adelson (Reg. No. 51,204)
David L. Vanik (Reg. No. 64,547)

Arnold & Porter LLP
Attn: IP Docketing
555 Twelfth Street, N.W.
Washington, DC 20004
Telephone: (202) 942-5000
(202) 942-5999 facsimile